

BEFORE THE POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

CH2M HILL HANFORD GROUP, INC.,
UNITED STATES DEPARTMENT OF
ENERGY; FLUOR HANFORD, INC., and
DURATEK FEDERAL SERVICES OF
HANFORD, INC.,

Appellants,

v.

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY,

Respondent.

PCHB NOS. 04-137, 04-138

ORDER ON SUMMARY
JUDGMENT

Appellants CH2M Hill Hanford Group, Inc., United States Department of Energy (USDOE), Fluor Hanford, Inc., and Duratek Federal Services of Hanford, Inc. (jointly referred to herein as Hanford) are challenging a Notice of Penalty and Administrative Order issued by the Washington Department of Ecology (Ecology) on September 21, 2004, for alleged violations of dangerous waste regulations. The penalty was in the amount of two hundred seventy thousand dollars (\$270,000). The Administrative Order directed the USDOE and its contractors to take a variety of actions to come into compliance with the State's Hazardous Waste Management Act, RCW Chapter 70.105, and the Dangerous Waste Regulations, Ch. 173-303 WAC. A key basis for the penalty and Administrative Order was the failure of Hanford to report the receipt of mixed waste from an off-site generator without a manifest and to confirm its knowledge of

1 mixed waste shipped to Hanford from another facility. Other violations were also alleged by
2 Ecology.

3 Two separate appeals were filed with the Board and the cases were consolidated for
4 hearing by prior Board order. Hanford and Ecology have each filed a summary judgment motion
5 raising the issue of whether the laboratory equipment and debris contaminated during off-site
6 treatability studies and returned to Hanford is properly considered exempt from Resource
7 Conservation and Recovery Act (RCRA) requirements as “residue” under the treatability study
8 sample exemption contained in federal and state hazardous/dangerous waste regulations.

9 In considering the motions, the Board, comprised of William H. Lynch, chair, Kathleen
10 D. Mix, and Andrea McNamara Doyle, reviewed the following submissions:

- 11 1. Ecology’s Motion for Summary Judgment on Issue One.
- 12 2. Declaration of Alexandra K. Smith in Support with Exhibits A-K.
- 13 3. Declaration of Robert Wilson in Support with Exhibits A-C.
- 14 4. Appellants’ Motion for Summary Judgment and Memorandum with Exhibits 1-
15 29.
- 16 5. Ecology’s Response to Appellants’ Motion for Summary Judgment.
- 17 6. Declaration of Robert Wilson in Support of Ecology’s Response with Exhibit A.
- 18 7. Declaration of Suzanne Dahl-Crumpler in Support of Ecology’s Response.
- 19 8. Declaration of James Schwartz with Exhibits A-B.
- 20 9. Appellants’ Response Memorandum in Opposition to Respondent’s Motion for
21 Summary Judgment on Issue One with Exhibits 1-3.

1 “HFFACO” or the “Tri-Party Agreement.” Under the agreement, Ecology regulates the
2 hazardous or dangerous waste component of the mixed waste under the state Hazardous Waste
3 Management Act, Ch. 70.105 RCW (HWMA). Ecology is authorized by the EPA to implement
4 the HWMA in lieu of federal regulation under the RCRA. (Appellants’ Motion for Summary
5 Judgment, Ex. 11).

6 Fluor, CH2M HILL, and their subcontractors, including Duratek, perform various waste
7 management activities at Hanford under contracts with USDOE. The waste management
8 activities relevant to this case include cleanup of approximately 54 million gallons of waste
9 stored in Hanford’s large underground storage tanks. One strategy for the clean-up is
10 construction of a Waste Treatment and Immobilization Plant (WTP) to vitrify (convert to glass)
11 the tank wastes. USDOE intends the vitrification treatment to render the high-level fraction of
12 the mixed wastes inert, thereby making it possible to dispose of the material in a geologic
13 repository. In an effort to develop successful treatment technologies, USDOE sends samples of
14 Hanford mixed waste to the Savannah River National Laboratory (Savannah River) for testing of
15 various treatment technologies, including vitrification. (Westcott Declaration, p. 2-3). These
16 studies occur under the authority of the “treatability sample study exclusion,” discussed at length
17 in this opinion. The parties agree that the treatability studies are an important step in developing
18 processes for safe land disposal of the Hanford wastes. (Wilson Declaration, Ex. A).

19 During the treatability studies of Hanford waste samples at Savannah River, laboratory
20 equipment, testing materials, and personal protective equipment worn by laboratory staff
21 becomes contaminated through contact with the samples. Material contaminated by contact with

1 samples from Hanford is handled separately from other laboratory waste at the Savannah River
2 laboratory, and no material contaminated by Hanford waste is introduced into other waste
3 streams at Savannah River. (Wilmarth Declaration, p. 3-7). After completion of the treatability
4 studies, USDOE has directed Savannah River to return the samples and other materials the
5 agency considers “residue” to Hanford for disposal. Items such as gloves, booties, pipettes,
6 beakers, containers, filters, pumps, tubing, and other materials that have become contaminated
7 by contact with the radioactive and hazardous samples are returned to Hanford at the conclusion
8 of treatability studies. The primary dispute at issue in the pending motions is whether such
9 laboratory equipment and debris contaminated during treatability studies is properly considered
10 exempt from regulation under WAC 173-303-071(3) as “residues” within the meaning of WAC
11 173-303-071(3)(r)(i) and 173-303-071(3)(s)(x).

12 Treatability study sample exemption history.

13 The treatability study sample exemption was adopted by the EPA in 1988. Earlier, in
14 1981, the EPA had promulgated what is known as the “lab sample exclusion.” 46 Fed. Reg.
15 47426 (Sept. 25, 1981)(Smith Declaration, Ex. B). The lab sample exclusion conditionally
16 exempts samples of wastes that are sent to laboratories solely for determining their
17 characteristics or composition from certain RCRA requirements. In adopting the 1981 lab
18 sample exclusion, the EPA concluded that a number of factors served to protect the public safety
19 during the transport and testing of small amounts of sample materials, justifying an exemption
20 from RCRA’s generator and transporter requirements. The “Background” section of the final
21

1 treatability study exemption outlines the rationale for adoption of the earlier lab sample
2 exclusion:

3 The Agency granted this exclusion because of the *de minimis* public
4 health and environmental risks involved. In particular, the Agency found
5 that certain incentives already existed that would assure protection of
6 human health and the environment without requiring these samples to be
7 subject to the full set of Resource Conservation and Recovery Act
8 (RCRA) hazardous waste regulations. These incentives include (1) the
9 costs associated with sample collections, shipping, analysis, and storage;
10 (2) the generator's need to obtain results of analyses to determine if and
11 how they must comply with the RCRA hazardous waste requirements;
12 and (3) the considerable likelihood that a testing laboratory would return
13 the sample to the generator as part of a contractual agreement (partly
14 based on the testing laboratory's desire to avoid the costs of disposal),
15 reducing the concern that the sample would be indiscriminately disposed.

16 53 Fed. Reg. 27290 (July 19, 1988). Finding that the sample testing process could be operated
17 safely without the full range of RCRA requirements, EPA adopted an interim final rule on
18 September 25, 1981 (see 46 Fed. Reg. 47426) that conditionally exempted waste samples sent
19 solely for testing from the RCRA Subtitle C hazardous waste regulations. The EPA summarized
20 the lab sample exclusion in the Preamble to the treatability study sample exemption:

21 In particular the regulations exempt waste samples from the Subtitle C
requirements when: (1) The sample is being transported to the laboratory
for testing or is being transported back to the sample collector after the
testing; (2) the sample is being stored by the sample collector or
laboratory before testing or after testing prior to its return to the
generator; (3) the sample is being analyzed to determine its
characteristics or composition; or (4) the sample is being stored at the
laboratory for a specific purpose such as a court case or enforcement
action.

1 52 Fed. Reg. 27290 (July 19, 1988) (referencing lab sample exclusion). Washington
2 adopted a parallel regulation excluding laboratory samples from full RCRA
3 regulation, which is found at WAC 173-303-071(3)(1).

4 The lab sample exclusion did not extend to laboratory debris generated during sample
5 testing or to the larger-size samples used in treatability studies. 46 Fed. Reg. 47427-28 (Sept. 25,
6 1981). In September 1987, EPA began a comment process leading to adoption of a rule
7 excluding treatability study samples from full RCRA regulation under certain conditions. A
8 Notice of Data Availability was issued requesting comment on “whether the sample exclusion
9 provision should be expanded to include waste samples used in small-scale treatability studies.”
10 53 FR 27290 (July 19, 1988). The EPA expressed a desire to facilitate research and development
11 activities being undertaken by those exploring new and better treatment methods as an
12 alternative to the land disposal of hazardous waste. The Agency, however, also emphasized its
13 overarching mission to protect the public interest:

14 The Agency intends to promote, not defeat, research and development in
15 support of the national objectives to reduce land disposal of hazardous
16 wastes and to increase reliance on waste minimization and treatment
17 technologies that reduce risk to human health and the environment.
18 However, the Agency remains pledged to carry out its primary statutory
19 obligation to ensure that removing regulatory barriers does not result in
20 unwarranted or increased risks to human health and the environment.
21 The Agency has determined that this balance can be properly maintained
in promulgating a RCRA exemption for small scale treatability studies.

Id. at 27292.

1 The Notice also presented information and requested comment concerning the
2 appropriate limitations that could be imposed if the sample exclusion were expanded. *Id.* at
3 27290. The majority of those commenting agreed with the concept of expanding the sample
4 exclusion to apply to waste samples used in small-scale treatability studies. *Id.* at 27291.

5 After receipt of comments, the EPA did promulgate an exclusion for treatability study
6 samples, which extends to activities related to sending the sample for testing, the testing process,
7 temporary storage at the laboratory, and shipping the sample and residues back to the generator.
8 EPA emphasized that the purpose of the exemption was for conducting treatability studies and
9 not for the commercial management of hazardous waste. *Id.* 53 FR at 27293. As with the
10 original lab sample exclusion, EPA noted that it could exempt hazardous waste used in small-
11 scale treatability studies from RCRA because a variety of factors would combine to ensure that
12 there were *de minimis* risks to human health and the environment. *Id.* at 27292. These included
13 limitations on the size of the sample, the amount of waste that could be stored at a lab, and that
14 the sample and residues must still be managed as a hazardous waste, among others. *Id.* at 27292.

15 Once samples and residues are returned to the generator, they are no longer exempt under
16 the treatability study exemption. “Ultimately, the unused sample and residues that are still
17 hazardous must be manifested and disposed of in a RCRA-designated facility by the laboratory
18 or testing facility, the waste generator, or sample collector.” *Id.* at 27297.

19 Ecology’s inspection.

20 Ecology conducted a routine inspection of the Hanford site from April 21, 2004 through
21 June 30, 2004. During that inspection, Ecology discovered Hanford had received at least 83

1 fifty-five (55) gallon drums of laboratory equipment and debris contaminated during treatability
2 studies of Hanford waste at Savannah River. The drums were shipped from Savannah River to
3 Hanford without a manifest, the regulatory mechanism for tracking hazardous waste from
4 generation to disposal, because USDOE considered this material to be “residue” under the
5 treatability study sample exclusion. Ecology does not agree that this material is “residue” for
6 purposes of the exemption from regulation and instead characterizes the contaminated laboratory
7 equipment and debris as a new waste stream, subject to the same requirements for manifesting,
8 designation, and disposal as any other lab waste.

9 As a result, an Administrative Order and a Notice of Penalty were issued to the appellants
10 alleging four violations of WAC Chapter 173-303: (1) Failing to report the receipt of mixed
11 waste without the shipment being accompanied by a hazardous waste manifest, (2) failure to
12 ensure waste management personnel were adequately trained in dangerous or hazardous waste
13 management, (3) failure to maintain written documentation in the Hanford operating record of
14 waste verification activities conducted by Hanford waste management personnel, and (4) failure
15 to adequately confirm their knowledge about mixed waste shipped from Savannah River to
16 Hanford prior to treatment, storage, and/or disposal. (Exhibit 18 to Appellant’s Motion). The
17 Notice of Penalty associated with the violations assesses a civil penalty of two hundred seventy
18 thousand dollars (\$270,000) against the appellants, jointly and severally.¹ In this case the
19
20

21 ¹ The penalty was assessed for three of the four alleged violations. No penalty was assessed for the purported reporting violation under WAC 173-303-390. (Exhibit 19 to Appellants’ Motion)

1 appellants are challenging the Administrative Order issued by Ecology and the associated
2 penalty.

3 ANALYSIS

4 Summary judgment is a procedure available to avoid unnecessary trials on formal issues
5 that cannot be factually supported and could not lead to, or result in, a favorable outcome to the
6 opposing party. *Jacobsen v. State*, 89 Wn.2d 104, 569 P.2d 1152 (1977). The summary
7 judgment procedure is designed to eliminate trial if only questions of law remain for resolution.
8 Summary judgment is appropriate when the only controversy involves the meaning of statutes,
9 and neither party contests the facts relevant to a legal determination. *Rainier Nat'l Bank v.*
10 *Security State Bank*, 59 Wn. App. 161, 164, 796 P.2d 443 (1990), *review denied*, 117 Wn.2d
11 1004 (1991).

12 The party moving for summary judgment must show there are no genuine issues of
13 material fact and the moving party is entitled to judgment as a matter of law. *Magula v. Benton*
14 *Franklin Title Co., Inc.*, 131 Wn.2d 171, 182; 930 P.2d 307 (1997). A material fact in a
15 summary judgment proceeding is one that will affect the outcome under the governing law.
16 *Eriks v. Denver*, 118 Wn.2d 451, 456, 824 P.2d 1207 (1992). All facts and reasonable inferences
17 must be construed in favor of the nonmoving party in a summary judgment. In this case, the
18 facts material to deciding the motion are not in dispute and the case is ripe for summary
19 judgment.

1 The Board is asked to interpret the scope and meaning of the treatability study sample
2 exemption at 40 C.F.R. 261.4(e) and (f) and the parallel Washington exclusion at WAC 173-303-
3 071(3)(r) and (s). The primary issue from the Pre-Hearing Order in dispute on this motion is:

4 Whether filter material, glassware, personal protective clothing, and
5 other items, that become contaminated by treatability study samples
6 during the performance of treatability studies are “residues” within the
7 meaning of WAC 173-303-071(3)(r)(i)(D) and (3)(s)(x) that are
8 excluded from regulation pursuant to WAC 173-303-071(3)?

9 The parties have been unable to cite any case law on this issue, and the case appears to be a
10 matter of first impression before this Board or any other tribunal.

11 In interpreting the meaning of the regulations establishing the treatability study sample
12 exclusion, the Board reviews the regulation as if it were a statute. The standards for interpreting
13 a statute have been outlined by the Washington State Supreme Court as follows:

14 The primary goal of statutory interpretation is to ascertain and give effect
15 to the legislature’s intent and purpose. This is done by considering the
16 statute as a whole, giving effect to all that the legislature has said, and by
17 using related statutes to help identify the legislative intent embodied in
18 the provision in question. If, after the inquiry, the statute can reasonably
19 be interpreted in more than one way, then it is ambiguous and resort to
20 principles of statutory construction to assist in interpreting it is
21 appropriate.

22 *Department of Labor & Industries of the State of Washington v. Gongyin*, 154 Wn.2d 38, 44-45,
109 P.3d 816 (2005); *Ecology v. Campbell & Gwinn, LLC*, 146 Wn.2d 1, 11, 43 P.3d 4 (2002);
Burlington Northern v. Johnston, 89 Wn.2d 321, 326, 572 P.2d 1085 (1977). Statutes shall be
interpreted in a manner that best advances the perceived legislative purpose. *Morris v. Blaker*,
118 Wn.2d 133, 143, 821 P.2d 482 (1992).

1 The EPA's purpose in promulgating the treatability study sample exemption is three-fold:
2 to promote research and development, to increase reliance on waste minimization and treatment,
3 and to protect human health and the environment.

4 The Agency intends to promote, not defeat, research and development in
5 support of the national objectives to reduce land disposal of hazardous
6 wastes and to increase reliance on waste minimization and treatment
7 technologies that reduce risk to human health and the environment.
8 However, the Agency remains pledged to carry out its primary statutory
9 obligation to ensure that removing regulatory barriers does not result in
10 unwarranted or increased risks to human health and the environment.
11 The Agency has determined that this balance can be properly maintained
12 in promulgating a RCRA exemption for small scale treatability studies.

13 53 Federal Register 27292 (July 19, 1988).

14 The EPA went on to describe the rationale for its regulatory action stating, "[T]he
15 Agency believes that it can exempt hazardous waste that is used in small-scale treatability studies
16 from the RCRA hazardous waste regulations because a number of factors will combine to ensure
17 that the risks to human health and the environment are *de minimis*." The enumerated factors
18 limiting risk to the public included:

- 19 (1) A limitation on the size of the sample that is exempted;
- 20 (2) The high cost of collecting and shipping the sample;
- 21 (3) A limitation on the quantity of waste that can be shipped at any one time;
- (4) The applicability of the Department of Transportation (DOT), U.S. Postal Service (USPS), or other regulations governing the transportation of hazardous materials;

1 (5) A limitation on the amount of hazardous waste that can be stored at
2 a laboratory or testing facility;

3 (6) A limitation on the amount of hazardous waste that may be
4 processed (i.e., tested in a treatability unit) in any one day;

5 (7) The prohibitive costs involved in conducting legitimate treatability
6 studies as an alternative to commercial treatment and disposal;

7 (8) A limitation on the time that a waste sample used in a treatability
8 study or any residues generated from such studies may remain at the
9 laboratory or testing facility without being subject to the hazardous waste
10 regulations;

11 (9) The RCRA requirement that any unused sample and residues from
12 a treatability study must still be managed as a hazardous waste (if, in
13 fact, it is still hazardous); and

14 (10) Certain reporting and recordkeeping requirements that will enable
15 the Agency to conduct inspections and bring enforcement actions against
16 persons who abuse this exemption. In additions, regulations and
17 requirements administered by other Federal agencies such as the
18 Occupational Safety and Health Administration (OSHA) also ensure
19 proper management.

20 *Id.*

21 The Hanford situation presents an interesting question of the application of this regulation
and its purposes. A modest amount of hazardous material was transported to Savannah River for
treatability testing. A substantially larger amount of contaminated laboratory equipment and
debris was transported back to Hanford. None of this laboratory equipment and debris originated
at Hanford. It is being transported to Hanford for the first time at the conclusion of the
treatability study. Should the treatability study sample exclusion be applied to this material, a
large amount of contaminated waste is allowed to be returned to Hanford without a regulatory

1 manifest and without application of other rules that require tracking, identification, and analysis
2 of such new waste.

3 The factors cited above in support of a *de minimis* impact to human health and the
4 environment logically support construing the exemption to include sample material being used in
5 a treatability test, the substances added to the sample during the course of the testing, and the
6 matter remaining after completion of the chemical or physical process of treatment of a particular
7 sample(s). However, EPA's stated rationale for the exemption is not convincingly applied to the
8 transport of significant quantities of contaminated laboratory equipment and debris.

9 EPA based the exemption from manifesting requirements otherwise applicable to
10 treatability study samples/residues on the low likelihood a sample used in an expensive study
11 would be disposed of indiscriminately.

12 One difference is that these waste samples will not require a manifest.
13 EPA believes that a manifest is not required in this situation, since the
14 generator is spending large sums of money to obtain the results of a
15 treatability study. Thus, it is highly unlikely that the sample would be
16 indiscriminately disposed. Furthermore, the generator or sample
17 collector is likely to have a contractual arrangement with the laboratory
18 or testing facility conducting the treatability study either to have the
19 facility return any unused sample and/or any residues that are generated
20 from the treatability study for subsequent manifesting and shipment to a
21 designated facility (see 40 CFR 260.10) or recycling facility or have the
laboratory or testing facility directly manifest and ship the wastes to an
appropriate designated facility within the specified time limits.

19 *Id.*, at 27292. While the EPA expressed confidence the valuable tested material would be
20 handled carefully, similar assurance is lacking when the material is worthless contaminated
21 laboratory equipment and debris. The chance of careless or "indiscriminate" disposal is much

1 higher for laboratory waste than for the more valuable tested material. The majority of the items
2 listed by the EPA in support of the exclusion relate to the limited volume of material being
3 excluded² or to the valuable nature of the process and/or material.³ Laboratory debris differs
4 from sample material in both areas. As evidenced by the Hanford situation, characterizing
5 laboratory debris as residue would substantially increase the volume of exempt material without
6 the inherent safeguards based on the value of the sample material and the resulting product.

7 Ecology's interpretation of the treatability study sample exclusion does not recognize
8 contaminated laboratory equipment and debris as an exempt category of hazardous waste.
9 Ecology's analysis begins with the relationship between the laboratory sample exclusion and the
10 treatability study sample exclusion. Ecology reasons that the treatability study sample exclusion
11 is an extension of the laboratory sample exclusion and should be interpreted consistently with it.
12 USDOE contends the treatability study sample exclusion is a totally separate, and differently
13 worded regulation, which stands on its own. While the treatability study exclusion is an
14 independent regulation, the Board is convinced it is closely related to the laboratory sample
15 exclusion. The strongest evidence of this link is the EPA Summary issued in connection with
16 EPA's adoption of the treatability study exemption, where the "expansion" and "extension" of
17 the laboratory sample exclusion to small-scale treatability studies was mentioned several times.

18 On September 18, 1987, the Environmental Protection Agency (EPA)
19 published a Notice of Data Availability, which requested comment on

20 ²53 Fed. Register 27292, see subparagraphs 1, 3, 5, and 6.

21 ³ *Id.*, see subparagraphs 2 and 7.

1 *whether the sample exclusion should be expanded* to include waste
2 samples used in small-scale treatability studies. ... The Notice also
3 presented information and requested comment concerning the
 appropriate limitations that could be imposed *if the sample exclusion*
 were expanded.

4
5 53 Federal Register 27290.

6 The commenters in general agreed with HWTC that the Agency should
7 *expand the sample exclusion* provision to apply to waste samples used in
 small-scale treatability studies.

8
9 53 Federal Register 27291.

10 As noted above, comments in 1981 suggested a need to *extend the*
11 *sample exclusion provision* to treatability studies because of the low risk
12 and the large benefits of conducting these studies if RCRA permits were
13 not required.

14
15 *Id.* (emphasis added).

16 The lab sample exclusion is a limited exemption from RCRA requirements. It applies
17 only to the very small samples necessary to characterize the nature of a potentially hazardous
18 material and not to the laboratory equipment used in the characterization analysis. With
19 reference to the lab sample exclusion, EPA has specifically stated "...this [Exclusion] does not
20 cover the transportation, storage, treatment, or disposal of wastes generated by a laboratory
21 including samples which are discarded after analysis is completed, and other laboratory wastes."
22 46 Federal Register 47428. *See also*, EPA FaxBack 12917 (April 30, 1987) (Smith Declaration,
23 Ex. I). Labs conducting such testing are responsible for proper handling of their own laboratory
24 equipment and expendables, whether contaminated or not. (Wilson Deposition, p. 403; p. 432).

1 Unfortunately, neither the treatability study sample exemption, nor the EPA
2 documentation accompanying the final rule's adoption, specifically address the status of
3 laboratory debris, as the Agency did under the lab sample exclusion. The Board is left to
4 consider whether the intent of the regulation is more consistent with an exclusion limited to the
5 sample and other materials actually used or generated as part of the testing or whether the
6 exclusion properly extends to a large additional body of laboratory equipment and debris used
7 during the testing process. Construing the treatability study sample exemption as an expansion
8 of the lab sample exemption supports the more narrow reading. It also seems unlikely that the
9 EPA would adopt an exemption for an entirely new, and potentially large, category of
10 contaminated material without any direct discussion of the topic.

11 The term residue is not defined in the Washington Hazardous Waste Management Act or
12 state regulations; nor is it defined in RCRA or the federal regulations. Ecology points to the
13 dictionary definition of residue in further support of its argument against inclusion of laboratory
14 debris in the treatability study sample exclusion. When interpreting a regulation, in the absence
15 of a statutory or regulatory definition, "words should be given their ordinary or plain meaning."
16 *Aponte v. Washington Dep't. of Soc. & Health Services*, 92 Wn.App. 604, 617-18, 965 P.2d 626
17 (1998). This can properly include reference to a dictionary. *American Legion Post No. 32 v.*
18 *Walla Walla*, 116 Wn.2d 1, 8, 802 P.2d 784 (1991); *Graham v. Northshore School Dist.* 99
19 Wn.2d 232, 244, 662 P.2d 38 (1983). *The American Heritage Dictionary of the English*
20 *Language* (4th Ed. 2000) defines "residue" as:

- 21 1. The remainder of something after removal of parts or a part.

1
2 2. Matter remaining after completion of an abstractive chemical or
3 physical process, such as evaporation, combustion, distillation, filtration;
4 residuum.

5 In the case of a treatability study, this definition would apply to the substance(s) remaining after
6 the original sample material has undergone chemical or physical changes during the treatability
7 study. If the study involves the addition of material to the sample, as is the case in vitrification
8 studies, the residue could include additional testing material beyond the original sample. The
9 definition would not, however, include laboratory equipment completely uninvolved in the
10 chemical or physical reactions completed as part of the treatability testing.

11 Like the lab sample exclusion, the treatability study sample exclusion is an exception to
12 the general terms of RCRA and the HWMA. Exceptions to the general terms of a statute or
13 regulation should be strictly construed, with any doubt resolved in favor of the general
14 provisions rather than the exceptions. *State v. Wright*, 84 Wn.2d 645, 652, 529 P.2d 453 (1974);
15 *Hall v. Corporation of Catholic Archbishop of Seattle*, 80 Wn. 2d 797, 801, 498 P.2d 844 (1972).
16 In this case, the treatability study sample exclusion should be not be given an overly broad
17 interpretation which would extend it beyond items involved in the chemical or physical reactions
18 intentionally initiated as part of the test. Limiting the exception to the sample and closely
19 associated material is consistent with the name, treatability study *sample* exclusion, and with the
20 enunciated intent of the final federal rule:

21 As a result of comments received, EPA is today issuing a final rule that
conditionally exempts *waste samples* used in small-scale treatability
studies from Subtitle C regulation. Consequently, generators of the

1 waste samples and owners or operators of laboratories or testing facilities
2 conducting such studies will be exempt from the Subtitle C hazardous
3 waste regulations, including the permitting requirements, when certain
4 conditions are met.

5 53 *Federal Register* 27290 (July 19, 1988)(emphasis added). The broad definition of residue
6 suggested by the appellants would exempt anything connected with the treatability study from
7 RCRA regulation. This deviates from the focus of the exemption, which is on waste samples
8 used in treatability studies. Such a far reaching construction would be inconsistent with the
9 requirement to construe exemptions narrowly.

10 Hanford claims that Ecology's construction of residue serves to read the word
11 "generated" out of the regulation in violation of a fundamental requirement of regulatory
12 interpretation which seeks to give meaning to all terms in the regulation. (Hanford
13 Memorandum in Support of Motion for Summary Judgment, p. 18-19), citing *Carson Harbor*
14 *Village, Ltd. v. City of Carson*, 270 F.3d 863, 883 (9th Cir. 2001). The state and federal
15 treatability study sample exemptions and the Preamble to the EPA's final rule all make reference
16 to residue "generated" during a treatability study. The plain meaning of the term "generated" is
17 defined in the dictionary as: "To originate by a vital chemical or physical process." *Merriam-*
18 *Webster's Collegiate Dictionary* 484 (10th ed. 2001). Contrary to Hanford's assertion,
19 construing the treatability study sample exemption in a manner that covers the sample material
20 used in the study, any material added to the sample material during the study, and any end
21 products of the chemical or physical reactions being evaluated during the study would give
meaning to the term "generated." The material created during the treatability study process

1 could be different in form and character from the original sample. The resulting product or
2 products would have originated through a vital chemical or physical process contemplated by the
3 study protocol. As a result, the term “generated” can be given full meaning without expanding
4 the exemption to include laboratory equipment that is not a part of the desired chemical or
5 physical reactions.

6 Hanford claims Ecology has improperly ignored language in another state hazardous
7 waste regulation that could shed light on the meaning of residue in the treatability study sample
8 exemption. The regulation addressing materials reclaimed and reused in a production process
9 includes a provision distinguishing exempt reusable products from residues that must be handled
10 with full protection:

11 (q) As of January 1, 1987, secondary materials that are reclaimed and
12 returned to the original process or processes in which they were
generated where they are reused in the production process provided:

13 (v) A generator complies with the requirements of chapter 173-
14 303 WAC for any residues (e.g., sludges, filters, etc.)
15 produced from the collection, reclamation, and reuse of the
secondary materials.

16 WAC 173-303-071(q)(v). This reference to residues describes those items that cannot be
17 reclaimed and reused and subjects them to the full regulatory requirements of the dangerous
18 waste rules. The term residue is not being used to describe an exempt category, so the need to
19 narrowly construe the language in an exemption is not present. The examples of residue from a
20 production process include sludges, which may be material remaining after a particular chemical
21 or physical reaction. Filters clearly are not an active ingredient in chemical or physical reactions

1 occurring or precipitated as part of a production process. This single reference to a filter, in an
2 entirely different context, describing a category of regulated waste rather than an exemption, is
3 not enough to warrant an expansive interpretation of the treatability study sample exemption.

4 In support of its argument for a broad construction of the treatability study sample
5 exemption, Hanford also points to language in an EPA document providing guidance to parties
6 regulated under the Comprehensive Environmental Response, Compensation, and Liability Act
7 (CERCLA). *EPA Guidance for Conducting Treatability Studies under CERCLA* (Appellants Ex.
8 23). The section of this guidance outlining the items that should be included in the Work Plan
9 for a CERCLA treatability study includes a provision addressing residuals management:

10 **3.5.10 Residuals Management**

11 This section of the Work Plan describes the management of treatability
12 study residuals. Residuals generated by treatability testing must be
13 managed in an environmentally sound manner. Early recognition of the
14 types and quantities of residuals that will be generated, the impacts that
15 managing these residuals will have on the project schedule and cost, and
16 the roles and responsibilities of the various parties involved in the
17 generation of residuals is important for their proper disposal.

18 The Work Plan should include estimates of both the types and quantities
19 of residuals expected to be generated during treatability testing. These
20 estimates should be based on knowledge of the treatment technology and
21 the experimental design. Project residuals may include the following:

- Unused waste not subjected to testing
- Treated waste
- Treatment residuals (e.g., ash, scrubber water, and combustion gases)
- Laboratory samples and sample extracts
- Used containers or other expendables
- Contaminated protective clothing and debris

1 This section outlines how treatability study residuals will be analyzed to
2 determine if they are hazardous wastes and specifies whether such
3 wastes will be returned to the site or shipped to a permitted treatment,
4 storage, or disposal facility (TSD)(See Subsection 3.9). In the latter
5 case, this section also identifies the waste generator (lead agency
6 responsible party, or contractor) and delineates the parameters what will
7 be analyzed for properly manifesting the waste and for obtaining
8 disposal approval from the TSD (see Table 8).

9 (Appellants' Ex. 23, p.33). This small portion of the guidance document highlights the need to
10 do advance planning for the proper disposal of residual items generated during treatability
11 testing. It does not purport to define the type of residue that qualifies for exemption under the
12 treatability study sample exemption of the RCRA regulations. It identifies a number of
13 categories of potential material and advocates analysis to determine "if they are hazardous
14 wastes," and determination of whether "such wastes will be returned to the site or shipped to a
15 permitted treatment, storage, or disposal facility (TSD)." *Id.* The guidance does not even
16 attempt to answer the question of whether wastes determined to be hazardous are within the
17 scope of the RCRA treatability study sample exemption.

18 As Ecology has pointed out, the CERCLA program and the RCRA program are two
19 different statutory frameworks with distinct goals and purposes. It is quite possible CERCLA
20 treatability testing could involve chemical or physical reactions that would not render every
21 beaker or pipette used during the test a hazardous waste. As a result, it is prudent for a person
designing a treatability study to examine the wide range of material that would be associated
with the testing process and make intentional decisions about the proper handling of the material.

1 Proper handling could include shipment to a permitted TSDF. Suggesting that residuals
2 management is a topic that should be covered in a CERCLA treatability study Work Plan does
3 not dictate, or even attempt to define, the scope of the RCRA treatability study sample
4 exemption. Rather, it leaves the door open for the study sponsor to determine the best allowable
5 method for disposing of material connected with a treatability study.

6 Hanford argues that an interpretation of the treatability study sample exclusion that does
7 not include laboratory equipment would frustrate the purpose of the exemption. Encouraging
8 laboratories to conduct innovative treatability testing is one of the goals of the exemption, but it
9 does not supplant EPA's paramount goal to protect the public health and safety, nor does it
10 eliminate the obligation to strictly construe the exception. More rigorous documentation of the
11 contents of debris containers would likely be required, but the evidence did not establish that
12 requiring laboratories to arrange for the proper disposal of contaminated equipment and debris
13 would significantly diminish laboratory involvement in treatability testing projects. There is
14 insufficient evidence before the Board to conclude that failure to exempt laboratory equipment
15 from RCRA requirements would force large numbers of laboratories to engage in long and costly
16 permitting processes to facilitate disposal of laboratory waste resulting from treatability testing.
17 In practice, construing the exemption as inapplicable to laboratory equipment and debris would
18 simply require the parties to agree on an appropriate process for disposing of the non-exempt
19 materials. Many laboratories are already disposing of contaminated equipment and remaining
20 sample material arising from testing under the lab sample exemption without great difficulty.
21 (App. Motion for Summary Judgment, Ex. 6 at 17-19). Arrangements for the proper disposal of

1 laboratory equipment and debris associated with treatability studies can be provided in the
2 contract establishing the testing process.

3 Hanford argues that the EPA and the South Carolina Department of Health and
4 Environmental Control (SCDHEC) are aware how the treatability study samples from Hanford
5 are being handled at Savannah River and that neither agency has initiated enforcement action
6 against the facility relating to the sample and debris handling. (Declaration of Daniel P. Skiff
7 and attachments). Hanford suggests this inaction demonstrates the agencies' agreement that the
8 treatability study sample exemption extends to the disputed equipment and debris. The evidence,
9 however, does not establish that either agency has taken a substantive position on the scope of
10 the treatability study sample exemption. SCDHEC has agreed not to take enforcement action
11 against Savannah River relating to its handling of the contaminated equipment and debris while
12 the dispute over the scope of the exemption is being litigated with the State of Washington.
13 (Skiff Declaration, Attachment 6). The lack of action by other regulatory agencies could be the
14 result of any number of reasons entirely unrelated to the issue in dispute here, and such inaction
15 provides no assistance to the Board in interpreting the treatability study sample exception.

16 While Hanford has raised legitimate arguments in support of their proposed interpretation
17 of the exception, the Board is convinced that neither the language nor the intent of the treatability
18 study sample exemption extends to contaminated laboratory equipment and debris. Limiting
19 exempt residue to the sample, the resulting test product, and any remaining material used in the
20 actual physical and chemical reactions initiated as part of the test, provides a meaningful and
21 workable definition of the exclusion. This interpretation is also more consistent than Hanford's

1 more expansive interpretation with the important public safety policies underlying the RCRA
2 program. As an exception to the basic requirements of RCRA and HWMA, the treatability study
3 exemption is properly given a narrow construction. The Board is convinced that the goal of
4 encouraging innovative technology will not be substantially harmed by failing to exempt
5 contaminated laboratory equipment and debris from RCRA and HWMA requirements. The
6 language of the treatability study sample exemption is clear, and the Board finds that the
7 exemption, by its terms, fails to include laboratory equipment and debris.

8 Finally, Hanford has asserted Ecology's position on the meaning of the term residue is
9 actually improper agency action because it should have been adopted as a rule. Ecology
10 responds that it was unnecessary to engage in rule-making simply to determine the meaning of
11 the term "residue" as used in the exemption. Both parties cite *Budget Rent A Car Corp. v. Dep't*
12 *of Licensing*, 144 Wn. 2d 889, 31 P.3d 1174 (2001) in support of their divergent positions. The
13 *Budget* case does recognize that certain types of agency action should be adopted only after
14 compliance with the Washington Administrative Procedure Act's (APA) rule-making
15 procedures. However, a detailed reading of the *Budget* case reveals that the Department of
16 Licensing's determination of the meaning of a particular measurement standard in the governing
17 documents did not require rule-making. The *Budget* court concluded that Licensing's
18 interpretation of "total purchases" in the agreement in question, did not trigger rule-making
19 because it did not impose a new requirement or alter an established requirement. The court
20 further enunciated a policy consideration:

1 In deciding this case, we are not unmindful of the consequences were we
2 to adopt a very broad interpretation of “rule” (in line with Budget’s
3 argument), and the fact that it would all but eliminate the ability of
4 agencies to act in any manner during the course of an adjudication. The
5 simplest and most rudimentary interpretation of a statute or regulation
6 would require an agency to go through formal rule-making procedures.
7 While it is true that the APA is designed to provide “greater public and
8 legislative access to administrative decision making,” RCW 34.05.001,
9 we believe it is equally true that the APA’s provisions were not designed
10 to serve as the straitjacket of administrative action.

11 *Budget*, 144 Wn.2d at 898. The Board is convinced Ecology was interpreting a term, “residue,”
12 already included in a regulation, rather than altering a qualification related to a benefit or
13 privilege conferred by law. Accordingly, rule-making under the APA was not required.

14 ORDER

15 Based upon the foregoing analysis, the Board denies Hanford’s Motion for Summary
16 Judgment seeking to include contaminated laboratory equipment and debris in the treatability
17 study sample exclusion. The Board grants partial summary judgment to Ecology, concluding
18 that the term “residue” in WAC 173-303-071(3)(r)(i) and WAC 173-303-071(3)(s)(x) does not
19 include laboratory equipment and debris contaminated during a treatability study. The remaining
20 issues in the pre-hearing order are set over for hearing.

21 DONE this 30th day of June 2006

POLLUTION CONTROL HEARINGS BOARD

William H. Lynch, Chair

Kathleen D. Mix

Andrea McNamara Doyle

Phyllis K. Macleod
Administrative Appeals Judge